

Title (en)
IPSC-DERIVED IMMUNE CELLS IN PROPHYLAXIS AND TREATMENT OF AGE-ASSOCIATED AND NEURODEGENERATIVE DISEASES

Title (de)
IPSC-ABGELEITETE IMMUNZELLEN BEI DER PROPHYLAXE UND BEHANDLUNG VON ALTERSASSOZIIERTEN UND NEURODEGENERATIVEN ERKRANKUNGEN

Title (fr)
CELLULES IMMUNITAIRES DÉRIVÉES DE IPSC DANS LA PROPHYLAXIE ET TRAITEMENT DE MALADIES ASSOCIÉES À L'ÂGE ET NEURODÉGÉNÉRATIVES

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Application
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Abstract (en)
[origin: WO2023023346A1] Mononuclear phagocytes derived from induced pluripotent stem cells, denoted as iMPs, which comprise monocytes generated from the induced pluripotent stem cells and optionally further macrophages generated from the induced pluripotent stem cells, are provided for use in improving cognitive function, improving neural health, and/or alleviating or treating a neurodegenerative disorder in a mammal. In various embodiments, the iMPs produce macrophages after transplantation or after being stimulated in vitro, and/or express macrophage markers. We showed that iMPs upon administration improve cognition and neural health in rodent models of aging, Alzheimer's disease, and amyotrophic lateral sclerosis. Treatment methods are also provided using mononuclear phagocytes generated from autologous stem cells or from induced pluripotent stem cells obtained from autologous cells in patients in need of treatment or prophylaxis of a neurodegenerative disorder.

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